

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**1446449 Methanol**

Revision date: 12.07.2017

Product code: 1446449

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

1446449 Methanol

CAS No: 67-56-1  
Index No: 603-001-00-X  
EC No: 200-659-6

**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance/mixture**

Water analysis Laboratory chemicals

**1.3. Details of the supplier of the safety data sheet**

Company name: HACH LANGE GmbH  
Street: Willstätterstr. 11  
Place: D-40549 Düsseldorf  
Telephone: +49 (0)211 5288-383  
e-mail: SDS@hach.com  
Internet: www.de.hach.com  
Responsible Department: HACH LANGE Ltd.  
5, Pacific Way  
Salford Manchester M50 1DL - United Kingdom  
Tel. +44 (0) 161 872 1487 \* Fax +44 (0) 161 848 7324  
e-Mail: info-uk@hach.com

HACH LANGE Ltd.  
Unit 1, Chestnut Road Western Industrial Estate  
IRL-Dublin 12  
Tel. +353 (0)1 4602522  
e-Mail: info-ie@hach.com

**1.4. Emergency telephone number:**

Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency service -

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Flammable liquid: Flam. Liq. 2  
Acute toxicity: Acute Tox. 3  
Acute toxicity: Acute Tox. 3  
Acute toxicity: Acute Tox. 3  
Skin corrosion/irritation: Skin Irrit. 2  
Serious eye damage/eye irritation: Eye Irrit. 2  
Specific target organ toxicity - single exposure: STOT SE 1  
Specific target organ toxicity - repeated exposure: STOT RE 1

Hazard Statements:

Highly flammable liquid and vapour.  
Toxic if inhaled.  
Toxic in contact with skin.  
Toxic if swallowed.  
Causes skin irritation.  
Causes serious eye irritation.  
Causes damage to organs.  
Causes damage to organs through prolonged or repeated exposure.

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**2.2. Label elements****Regulation (EC) No. 1272/2008****Signal word:** Danger**Pictograms:****Hazard statements**

H225	Highly flammable liquid and vapour.
H301+H311+H331	Toxic if swallowed, in contact with skin or if inhaled.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H370	Causes damage to organs.

**Precautionary statements**

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P311	IF exposed or concerned: Call a POISON CENTER/doctor.
P370+P378	In case of fire: Use dry sand to extinguish.
P501	Dispose of contents/container to Disposal.

**Additional advice on labelling**

The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.

**2.3. Other hazards**

None known.

**SECTION 3: Composition/information on ingredients****3.1. Substances**

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**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
67-56-1	methanol			100 %
	200-659-6	603-001-00-X		
	Flam. Liq. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, Skin Irrit. 2, Eye Irrit. 2, STOT SE 1, STOT RE 1; H225 H331 H311 H301 H315 H319 H370 H372			

Full text of H and EUH statements: see section 16.

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

Take off all contaminated clothing immediately.  
Show this safety data sheet to the doctor in attendance. Consult a physician.

**After inhalation**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**After contact with skin**

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**After contact with eyes**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**After ingestion**

Do NOT induce vomiting.  
Never give anything by mouth to an unconscious person. Rinse mouth with water.  
Consult a physician.

**4.2. Most important symptoms and effects, both acute and delayed**

Cannot be made non-poisonous. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. May be fatal or cause blindness if swallowed.

**4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Water mist Alcohol-resistant foam Dry chemical Carbon dioxide (CO<sub>2</sub>)

**Unsuitable extinguishing media**

None known.

**5.2. Special hazards arising from the substance or mixture**

H225 - Highly flammable liquid and vapour.  
Fire may liberate hazardous vapours. Carbon oxides

**5.3. Advice for firefighters**

In the event of fire, wear self-contained breathing apparatus.

**Additional information**

Use water spray to cool unopened containers.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Use personal protective equipment.

**6.2. Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**6.3. Methods and material for containment and cleaning up**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

**6.4. Reference to other sections**

Disposal : See also section 13

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

Avoid contact with skin and eyes.

Avoid breathing vapours, mist or gas. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

**Advice on protection against fire and explosion**

Combustible Liquid

Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharges.

**Further information on handling**

Wash hands before breaks and immediately after handling the product. General hygiene considerations

Observe label precautions.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

**Hints on joint storage**

Keep away from open flames, hot surfaces and sources of ignition.

**Further information on storage conditions**

Keep locked up or in an area accessible only to qualified or authorised persons.

**7.3. Specific end use(s)**

no data available

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
67-56-1	Methanol	200	266		TWA (8 h)	WEL
		250	333		STEL (15 min)	WEL

**Additional advice on limit values**

None known.

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### 8.2. Exposure controls

#### **Appropriate engineering controls**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Handle in accordance with good industrial hygiene and safety practice.

Ensure that eyewash stations and safety showers are close to the workstation location.

#### **Protective and hygiene measures**

Wash hands before breaks and after work.

General industrial hygiene practice.

Take off contaminated clothing and shoes immediately.

#### **Eye/face protection**

Safety glasses with side-shields conforming to EN166

#### **Hand protection**

Use barrier skin cream. Chemical resistant protective gloves

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### **Skin protection**

Complete suit protecting against chemicals Flame retardant antistatic protective clothing The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Remove and wash contaminated clothing before re-use.

#### **Respiratory protection**

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Use respirator when performing operations involving potential exposure to vapour of the product. This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used. Use NIOSH approved respiratory protection.

#### **Environmental exposure controls**

Do not let product enter drains. Risk of explosion.

## **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	colourless
Odour:	alcohol-like

#### **Changes in the physical state**

Melting point:	-98 °C
Initial boiling point and boiling range:	64,7 °C
Sublimation point:	no data available
Softening point:	not applicable
Pour point:	no data available
Flash point:	11 °C
Sustaining combustion:	No data available

#### **Flammability**

Solid:	no data available
Gas:	no data available

#### **Explosive properties**

no data available

Lower explosion limits:	6 vol. %
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Upper explosion limits:	37 vol. %
Ignition temperature:	464 °C
<b>Auto-ignition temperature</b>	
Solid:	no data available
Gas:	no data available
Decomposition temperature:	no data available
<b>Oxidizing properties</b>	
no data available	
Vapour pressure:	130,3 hPa
(at 20 °C)	
Vapour pressure:	546,6 hPa
(at 50 °C)	
Density (at 20 °C):	0,79 g/cm <sup>3</sup>
Bulk density:	not applicable
Water solubility:	completely soluble
<b>Solubility in other solvents</b>	
no data available	
Partition coefficient:	-0,77
Viscosity / dynamic:	0,597 mPa·s
Viscosity / kinematic:	no data available
Flow time:	no data available
Vapour density:	1,11
Evaporation rate:	no data available
Solvent separation test:	no data available
Solvent content:	no data available

**9.2. Other information**

Solid content:	not applicable
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**SECTION 10: Stability and reactivity****10.1. Reactivity**

no data available

**10.2. Chemical stability**

no data available

**10.3. Possibility of hazardous reactions**

no data available

**10.4. Conditions to avoid**

Heat, flames and sparks. Extremes of temperature and direct sunlight.

**10.5. Incompatible materials**

Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids

**10.6. Hazardous decomposition products**

no data available

**Further information**

Stable under recommended storage conditions.

**SECTION 11: Toxicological information**

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**11.1. Information on toxicological effects****Acute toxicity**

No data is available on the product itself.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
67-56-1	methanol				
	oral	LD50 mg/kg	5628	rat	
	dermal	LD50 mg/kg	17100	rabbits	
	inhalation (4 h) vapour	LC50	10 mg/l	rat	
	inhalation aerosol	ATE	0,5 mg/l		

**Irritation and corrosivity**

May cause eye and skin irritation.

**Sensitising effects**

no data available

**Carcinogenic/mutagenic/toxic effects for reproduction**

H341 - Suspected of causing genetic defects.

H361 - Suspected of damaging fertility or the unborn child.

**STOT-single exposure**

H370 - Causes damage to organs.

**STOT-repeated exposure**

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

**Aspiration hazard**

No aspiration toxicity classification

**Specific effects in experiment on an animal**

methanol:

LD50/dermal/rabbit = 15800 mg/kg

LD50/oral/rat = 5628 mg/kg

**Practical experience****Observations relevant to classification**

no data available

**Other observations**

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. May be fatal or cause blindness if swallowed. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

**Further information**

no data available

**SECTION 12: Ecological information****12.1. Toxicity**

No data is available on the product itself.

Do not flush into surface water or sanitary sewer system.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
67-56-1	methanol					
	Acute fish toxicity	LC50 mg/l	15400	96 h	Lepomis macrochirus (Bluegill sunfish)	
	Acute algae toxicity	ErC50 mg/l	22000	96 h	Pseudokirchneriella subcapitata (green algae)	
	Acute crustacea toxicity	EC50 mg/l	24500	48 h	Crustaceans	

**12.2. Persistence and degradability**

Biodegradability  
99%, 30d  
Ready biodegradability

**12.3. Bioaccumulative potential**

Partition coefficient: n-octanol/water  
log Pow: -0,77

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
67-56-1	methanol	-0,77

**12.4. Mobility in soil**

no data available

**12.5. Results of PBT and vPvB assessment**

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

**12.6. Other adverse effects**

Should not be released into the environment.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Advice on disposal**

In accordance with local and national regulations.

**Waste disposal number of waste from residues/unused products**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

**Waste disposal number of used product**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

**Waste disposal number of contaminated packaging**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

**14.1. UN number:** UN 1230

**14.2. UN proper shipping name:** Methanol



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**14.3. Transport hazard class(es):** 3 (6.1)**14.4. Packing group:** II**Inland waterways transport (ADN)****Other applicable information (inland waterways transport)**

Not tested

**Marine transport (IMDG)****14.1. UN number:** UN 1230**14.2. UN proper shipping name:** Methanol**14.3. Transport hazard class(es):** 3 (6.1)**14.4. Packing group:** II

Marine pollutant: -

EmS: F-E,S-D

**Air transport (ICAO-TI/IATA-DGR)****14.1. UN number:** UN 1230**14.2. UN proper shipping name:** Methanol**14.3. Transport hazard class(es):** 3 (6.1)**14.4. Packing group:** II**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

**14.6. Special precautions for user**

no data available

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

Not relevant

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 69: methanol

**Additional information**

Classification according to EU Directives 67/548/EEC or 1999/45/EC

The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.

**National regulatory information**

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water contaminating class (D): 1 - slightly water contaminating

**15.2. Chemical safety assessment**

For this substance a chemical safety assessment has not been carried out.

**SECTION 16: Other information****Changes**

Revision: 12.07.2017

Safety datasheet sections which have been updated: 2

Revision: 6.01.2016

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#### Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H301+H311+H331	Toxic if swallowed, in contact with skin or if inhaled.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.

#### Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.